Enrichment for Twice Exceptional Students

An Honors Thesis (HONR 499)

By

Sarah Reason

Thesis Advisor:
Dr. Lisa Rubenstein

Signed

Ball State University
Muncie, Indiana

April 2016

Expected Date of Graduation
May 2016

Abstract

Creating curriculum that addresses the needs for students who are "twice exceptional" with both giftedness and a disability is a challenging conundrum for some school districts. Educators are required to address state standards, school district curriculum, multiple student needs, and multiple goals for their learners. The creation of enrichment camps allows for students to experience educational content that is differentiated to remediate the students' weaknesses while enriching their strengths. After examining and creating a twice exceptional camp and interviewing both children and parents affected by this twice exceptionality, best practices of teaching these students are examined.
*Student Names have been changed to protect anonymity

Acknowledgements:

I would like to thank Dr. Lisa Rubenstein for advising me through this project and consistently giving me direction. Her help during this year long project and dedication to building my understanding has made this a passion-filled project. I'd also like to thank Miki Hamstra and Nina Yssel for their guidance and wisdom in working with twice exceptional students. Finally, I'd like to thank my parents and various volunteers from Epsilon Sigma Alpha who supported my camp.

Literature Review

Defining Twice Exceptional

Each student with exceptionalities is unique. Twice exceptional students are "students who demonstrate gifts and talents but also have a disability…and do not fit the stereotypical characteristics of students with a disability or giftedness" (Baldwin, Omdal, and Pereles 2015). For example, they are the students who excel in math concepts, but cannot write extensively. They are the students who show high verbal abilities but may use language in inappropriate ways. They could express an unusual imagination, have unique problem solving skills, or even display behavioral issues. The wide variety

of characteristics of these individuals in both the gifted and disability categories causes various inconsistencies in how educators address their needs.

In comparison to gifted peers, these students also show strengths in various subjects. However, twice exceptional students may have an unidentified disability, leading to others perceiving them as lazy or underachieving by choice. These students may stay on track with their peers until their courses become more difficult, especially around middle school years. They even may go completely unnoticed as needing evaluation for any sort of disability because their giftedness masks their additional exceptionalities. Conversely, when their disability is identified but their giftedness overlooked, they may be underestimated in classrooms with their peers with disabilities. Their school may only provide educational opportunities that focus on remediation or provide no challenge. Once this occurs, these children may experience boredom or frustration with school, and may exhibit behavioral issues within the classroom.

Twice exceptional students can demonstrate a variety of additional exceptionalities such as learning disabilities, sensory processing disorder, emotional and behavioral disabilities, or even ADHD/ADD. Due to their ability to show extreme strengths in some areas and major weaknesses in others, these students may completely miss educational opportunities that help them thrive. Understanding a relationship between the exceptionalities is an important skill for educators to develop and help with the unique challenges of this population.

Unique Challenges for Twice Exceptional Population: Identification

Often, these students go unnoticed or without programming that addresses both areas of giftedness and disability. In "The Twice Exceptional Dilemma," the National Education Association believes that "many seemingly average students are in fact students whose gifts and disabilities

mask one another" (3). Those students may be difficult to recognize in a general education classroom because their gifts may be overshadowed by their disability, their teachers may never recognize their disability through their gifts, or their schools see them as completely average (Badlwin et al., 2015). This reality of having gifts and disabilities eliminates the possibility of emphasizing either remediation or enrichment, as they both must be addressed.

Identifying these students can be one of the most challenging parts of giving appropriate education in a least restrictive environment to this population, as gifts and weaknesses are addressed separately in average classrooms, without much consideration of how each intertwines with the other (Baum, Schader, & Hebert, 2014). Identification, however, is essential because it allows for districts to consider and provide appropriate services. Misidentification or lack of identification results in issues for students whose giftedness allows them to compensate for their disabilities until curriculum becomes too difficult. Trends in research have shown that these students begin to show their deficits caused by disabilities as they progress through grades. According to Lois Baldwin's *The Council for Exceptional Children,* "it is not unusual for these students to 'hit a wall' beginning in middle school or later when they are no longer able to compensate with their ability to memorize material or verbalize responses" (218). If students are not identified as twice exceptional, and their needs not addressed until late in primary years, then they may already have an overwhelming gaps in their knowledge base. It becomes the responsibility of the educators to help identify students, enrich strengths, and remediate weaknesses or disabilities. With increasing knowledge of twice exceptional students' needs, the desire to create curriculum that supports their unique needs is evident.

Meeting Twice Exceptional Students Needs through Curriculum Design

Programming for twice exceptional students must address known best practices from both the gifted and the students with disabilities. They need a "comprehensive, individualized, flexible plan that addresses the whole child" (Yssel, Prater, & Smith 2010). Educational experiences for gifted students typically involve supplementing regular lessons with extension activities that provide an opportunity to explore topics in depth or at a faster pace. Addressing students' disabilities usually involves setting specific goals for remediation, then providing repetitive tasks to encourage learning. For both of these populations, it is important for educators to differentiate by modifying the level, pace, delivery, or materials of curriculum rather than adjusting the overarching curricular goals (Jeweler, Barnes-Robinson, Shevits, & Weinfeld, R, 2008). Focusing on an alteration of the methods taught rather than the content helps to address students' giftedness by expanding topics, while remediating weaknesses by providing different ways to express their understanding. With these best practices in mind, a unique way that educators have addressed twice exceptional students' needs is through the creation of summer or weekend enrichment camps.

Dr. Nina Yssel, a professor at Ball State University in the special education department has first-hand created a summer enrichment camps for twice exceptional youth for seven years. This professor along with others in the field of science, art, and mathematics, used a whole child approach to address the unique needs of twice exceptional students. This approach included three main considerations: personal strengths, academic needs, and social and emotional needs (Baldwin et al. 2014). The camp entitled *Puzzles, Mysteries, and Picasso*: *A Summer Camp for Students Who are Gifted and learning Disabled* created opportunities that allowed the students to demonstrate their inquisitiveness, excellent speaking skills, and true excitement when examining a topic of interest. To address personal strengths for students, the camp completed a survey with parents to

understand incoming campers' educational experiences and preferences. They took into account topics that student enjoy and are exceptionally strong in to develop their activities. In academics, they developed interdisciplinary lessons for a theme including science, art, and special curriculum by a police officer. Finally, to address student's social and emotional needs, the camp created a day-to-day interactions in the classroom and dormitory where students stayed in addition to a two hour session targeting social skill building.

After creating the camp with factors including differentiation, social opportunities, and problem solving, Dr. Yssel noted that students' weaknesses included "poor academic self-concepts and frustration when confronting their area of weakness…and resistance to problem solving activities" (Yssel, Margison, & Merbler, 2005). Inspired by Yssel's camp, the purpose of this project was to design a Saturday Enrichment Camp to provide a similar opportunity for students' strengths to be enriched and weaknesses to be challenged. In order to create this opportunity, it was necessary to consider students, parents, and teachers' perspectives, as well as observe existing extracurricular programming options. This next section highlights this process.

Qualitative Data Collection

Data Collection Methods

Data was collected via in-person and survey interviews with professionals who direct enrichment camps for twice exceptional students, as well as parents of twice exceptional students. All participants signed a wavier to be interviewed or take a survey via online form. Some statements were taken from students the day of the twice exceptional camp with parental and student permission. Other data was collected via informal observation and journaling.

Observations

During the beginning stages of my development of a twice exceptional camp, I observed a week long summer camp experience for twice exceptional students at Burris Laboratory school in Muncie, IN provided by Miki Hamstra, director of the Center for Gifted Studies and Talent Development at Ball State University. I visited three of the five days of camp and observed students and volunteers with a focus on one student. When designing the camp, Miki took her experiences with one of the campers, whose primary disability was sensory processing disorder to create all of her programming. The student began school in a general education setting, but was removed before the third grade because of various social problems as well as difficulties grasping curriculum. In spite of his difficulties in school, the student was able to complete complicated robotics building with little to no direction at a middle school level at the age of six. With these types of observations, without a formal diagnosis, Miki created a twice exceptional camp to address his deficits and strengths in one week, and invited several other twice exceptional students from the area.

Due to the camp being designed to meet his needs, I took notes in a journal about this student's social interactions, academic habits, and strengths while in the camp. He became the basis of my design for my own camp, which he attended. In addition, I took notes on the activity and schedule design of the camp provided by Miki. During my own twice exceptional camp on a Saturday, I took notes in a journal about student behavior between activities.

Since Yssel's original camp that demonstrated programming for twice exceptional students, Miki Hamstra has created a camp where eight students came for a week long series of day camps themed "Carnival Camp." This camp had a similar structure to Dr. Ysssel's, but did not include a residential component. To address the academic component of camp, the facilitators taught about forces and physics concepts used in real-life carnival rides. To accompany this content, they gave students free-building time to problem solve and create their own carnival ride models using Lego

kits. Students were challenged socially through a daily team building activity as well, which required communication and shared resources.

During these activities I focused primarily on "Alvin"* as he was the basis for the entire camp. During free building time, the student isolated himself from peers to focus on building. He rarely used the directions to create his Ferris wheel ride or scrambler. When other students came to talk to him about his ride, Alvin became bored with his building task and took a break by going to a separate room and watching leisure videos in the dark. The Alvin also frequently took breaks to use a scooter in the hallway to slide back and forth on his stomach during whole group activities. He sometimes ran from staff jokingly to gain attention. Alvin did not participate in any of the group activities in the three days that I observed him; however, he did engage with peers in competitive collaborative tasks such as building boats to float with the most weight on them. Although Alvin used frequent breaks in rooms separate from his peers, he still completed building his carnival rides throughout his camp experience.

While observing Mrs. Hamstra's camp, I also watched volunteer interactions with campers in hopes to have similar strategies for learning and teaching in my own camp. Most of this camp was exploration based, as students were given freedom on tasks with staff simply there to assist when possible. At all times, two staff were with Alvin, helping him to focus or take a break when needed. A third and sometimes fourth staff member paired up with small groups of students to help them with tasks and engage in conversation. In addition, two staff stayed with Alvin in the hallway on a scooter, while a volunteer helped the rest of the campers participate in group activities. In terms of keeping students active, every camper was active the entire time. When one became frustrated with an activity, a volunteer would redirect their frustration using a new activity in the break room or with a team activity. The schedule remained flexible, and sometimes campers broke

off to complete tasks that were not on schedule. Volunteers were also well trained in handling Alvin who wanted to escape the camper area by running through the hallways. They were firm and redirected him with a more controlled activity: "Instead of running, you can slide on your stomach on your scooter from this line on the hallway to this line on the hallway. If you go past it, we have to take the scooters away." This expectation was clear, and kept the student's break activity managed and on task.

This program was appropriate for this group because it provided choice opportunities for testing comfort zones and an alternative to normal paper and pencil class work to articulate ideas. Each student designed theme park rides, added details using Legos, and worked together to create various small tasks such as boats. This camp adhered to the three key considerations for programming for twice exceptional students, social/emotional, academic content, and student-strengths. With all criterion present, students of varying disabilities and giftedness thrived in the camp.

Interviews

After my twice exceptional camp observation, I interviewed Dr. Nina Yssel via recorded interview to gain her insights designing my own camp activities, as well as reflections of her own work with twice exceptional students. I used a survey pre-camp to gain insight on students' interests and strengths from their parents. In addition, I interviewed students while at the twice exceptional camp during lunch time about their strengths, weaknesses, and interests in school. I interviewed parents via an online survey which they completed after the students participated in the twice exceptional camp that I created. Finally, I interviewed volunteers from my own twice exceptional camp via internet survey.

Student Strengths and Interests

During pre-camp interviews, Alvin's mother explained that his strengths included "reading, astronomy, math, anatomy, robotics, and inventing; however, his weaknesses include reading social cues and remaining focused on a task for long. Since his last summer experience he was officially diagnosed with Asperger's which accounts for his social cues and focus issues." Another student's mother explained that his strengths included his love of "being a good friend in one on one or small groups." Parents explained that their students would get very invested in a topic (such as gymnastics or computers) and stay fixated on those topics for lengths of time. In regards to attitude toward school, each of the parents explained their child's boredom with school. One even stated, "he thinks school is boring. I'm pretty sure if he had less friends he would throw a fit to go at all. There's just nothing to do for him, he breezes through the class work then gets frustrated….in math, he's way above everyone else."

Social and Emotional Background

Each parent had different input about their student's emotional and social backgrounds. All of the parents mentioned that students were "isolated," or "preferring small groups" due to various reasons. One student enjoyed small groups because he was "less shy to work with his peers" while another student's mother explained that "she likes small groups because she can get all of her ideas out and likes to take control pretty quickly. She shows difficulty in cooperating in a group, which tends to leave her isolated...She wants to come up with all of the ideas and is not good at reading social cues in that way" Another common trend was student's desire to avoid certain tasks and their similar behaviors to do such. Alvin's mother explained that he "sometimes will just need a break, so if you have a room where he can watch a video or just talk to you for a few minutes about some video game he is playing, he'll be much more likely to work with you." Another student "gets

frustrated easily and lashes out at teachers and other students when tasks get too hard." Another parent explained that when tasks get hard her student "tries to manipulate her teachers into letting her do something else, like leaving the room for some trip to the office or she just won't do the work at all…sometimes papers just go missing in this house and you can bet it's something she didn't want to do!"

With these observations in mind, I created a flexible schedule just like Mrs. Hamstra's for the student's camp (see Mrs. Hamstra's schedule in Table 1). I also took student's boredom and fast paced learning into account. The students' interest in inventing was taken into account in Mrs. Hamstra's camp, as creating theme park rides was a hands-on activity that suited student interests and could hold attention. During the camp, students were given creative tasks and small lessons about physics principles such as pulleys, , and friction. These types of tasks take into account student's emotional and varying learning styles. The camp also provided special rooms for breaks including videos, blocks to play with, puzzles, and even scooter boards for the student to have physical stimulation by sliding across the floor. These optional break tasks helped Alvin and others cope with attention problems during the camp, as it gave them an outlet before they refocused on the task at hand.

Table 1: Carnival Rides Daily Schedule	
9:45-10:00	Check In
10:00-10:15	Welcome Activity
10:15-11:00	First Build Activity
11:-11:15	Snack/Restroom
11:30-12:15	Team Building Challenge
12:15-12:45	Lunch
1:45-1:30	Build 2
1:30-2:00	Restroom/Choice Time

Developing a Twice Exceptional Camp

Following observations and interviews of students, parents, and both Nina Yssel and Miki Hamstra, I began developing my own twice exceptional camp. This camp was set on a Saturday as a four hour enrichment program in the spring semester of 2016. I planned my camp with the same three criteria as these two directors: social and emotional development, academic planning, and strengths-focused exploration opportunities.

Social and Emotional Development

Students with twice exceptionalities are each unique; however, many need direct instruction and multiple opportunities to interact with peers in positive situations. Initially, I surveyed parents regarding their children's interests and needs. Many of these students invited to my camp had met previously; however, understanding each child's habits for socialization and friends helped me plan possible groupings for collaborative learning. Student's habits also influenced which team activities I implemented in my camp, as well as which teaching strategies. Considering both of my camper's difficulties with missing social cues on bossiness or controlling behaviors, I modeled my camp to include diverse groups with specific tasks to accomplish that would address communication skills, teamwork, and collaborative problem solving. To account for student's needs for breaks in case of

frustration or overstimulation from peers, I created a separate room across the hall from our main building room with video and blocks for them to practice a new activity for a set amount of time.

Academic Planning

The nature of this enrichment camp was not directly aligned to any lesson or learning that these students had previously experienced to my knowledge. My camp's theme reflected the reality show "Survivor" with problem solving tasks and building projects that simulated skills needed to survive in the wild. Although camp did not exemplify a typical Indiana Standards lesson enrichment, I planned lessons that provided a variety of materials for exploration and could be tied to concepts of interest including astronomy, critical thinking, engineering, and science. I also used student's interest in video games to present my material using a smart board. When planning academic lessons for twice exceptional students using differentiation to meet their needs is most important. For my students, I considered their preferred method of learning as building and creating all of the tasks for my camp as engineering or puzzle activities. Lessons included star gazing and navigation, building a fort for protection, collecting resources and protecting resources, supply and demand, nutrition, and engineering.

Emphasizing Strengths

Through inventories from parents, I considered students' strengths for learning. I examined interviews to find common strengths for my students, which included: physical and biological sciences, crafty inventions, puzzles, and space/astronomy. Finding commonalities between students allowed me to gear my instruction and curriculum toward those interests, capturing their attention through a flexible, yet task-driven program. In addition, when considering how my students would learn academic material, understanding their strengths and weaknesses contributed to my

understanding of the "whole child approach" as cited by Dr. Yssel. Considering student's strengths and interests allows enrichment to be focused toward gearing up for the appropriately challenging activities. When planning a twice exceptional camp, I emphasized hands-on projects that addressed student interests as well as encouraged their weaknesses in group work and communication. Because parents frequently mentioned their students' difficulties in writing and working in groups, I dedicated my projects to being solely verbally and kinesthetically based. Students did presentations on their findings or buildings to avoid writing, while building and modeling for kinesthetic building. To practice their group work, I used jigsaw methods, which required them to have specific roles in group activities to accomplish the overall task. These specific roles allowed students independence, while also seeking help from others to create the final projects.

Twice Exceptional Camp Agenda

The students participated in two building lessons, one collaborative task lesson, and then one "choice activity" lesson. All of the activities were spaced out and students were able to work independently on building lessons then present their builds.

Task 1: *Building Challenge: Forts*

- Objective: The students will create a fort that they can fit into and completely protects them from water and wind tests.
- Materials: Shredded plastic table cloths, tape, newspaper, popsicle sticks, construction paper, coffee filters, balloons, spray bottle, fan
- Description of Activities:

- Students read a prompt on the smart board that says "You must protect your tribe from enemies and the elements. A storm is brewing! Prepare a fort that you can fit into that will protect you!"
- Students create a fort using materials of their choice in 30 minutes.
- After testing the fort against the strength of a fan & a squirt bottle, students have 10 minutes to protect themselves again from wind (a fan) and rain (a squirt bottle) while inside the fortress

Task 2: *Team Challenge: Problem Solving for Movement*

- Objective: Given a set of rules, students will invent a means to move an object from one constructed fort to the other across the room.
- Materials: duct tape, string, balloons, straws, popsicle sticks, glue, construction paper, ping pong ball.
- Description of Activities:
  - Once forts are built, students are given the prompt that they must deliver "food" (ping pong ball) from one camp to another by creating a machine or system using any materials provided. Students are given the following rules
    - You cannot throw or hold the ball in your hands when moving it from one side of the room to the other.
    - The ball cannot touch the ground at any point during its traveling including but not limited to rolling or kicking

Task 3: *Building Challenge: Building Scarcity*

- Objective: Given 40 marshmallows and a box of spaghetti noodles, and a piece of paper students will create a tower that holds as many marshmallows as possible

- Materials: marshmallows, spaghetti noodles, piece of paper
- Description of Activities:
    - To practice concepts of material scarcity and resources, students will use spaghetti noodles and 40 marshmallows to create a tower that holds the most marshmallows possible, and is sturdy enough to stand on its own for 5 minutes.

Task 4: *Choice Activity*

- Objective: When given a choice, students will create a raft or catapult to move objects from one point to another
- Materials
    - Boats:
        - Duct tape, bubble wrap, egg cartons, scissors, tape, popsicle sticks
    - Catapults:
        - Tape and popsicle sticks
        - Catapult instructions
- Description of Activities
    - Students will choose to build a catapult or boat that can move an item from one point to another point while holding various weights.
    - Students will have 10-15 minutes to build with various check-in points

Reflecting on Specific Lesson Implementation

Task 1: Fort Building

Students enthusiastically began the camp as individuals creating their own forts. They became competitive over materials, but had completely different concepts in creating their original forts. We did not tell the students that there would be a wind and water test initially. This activity was successful, because students began a hands on activity that allowed them to be creative and problem solve. Students were simply told to build a fort that could protect them and they could fit inside. They asked questions about parameters, such as "Can we use the furniture?" As we introduced more challenges, the students remarked "that's too hard!" or "I have to start all over, are you kidding me?!" and exhibited some frustration. However, they continued to adapt their materials and projects with encouragement from camp staff. The added challenge of being inside the fort and being protected from the wind and rain led them to adding "security features" to their forts such as balloons to "warn me of wind that's about to come so I can add more layers of rain protectors if I need to." Through this task, students demonstrated their strengths through creatively problem solving to protect themselves from elements as more challenges were introduced. Students were required to adapt to new information, which causes some students with disabilities frustration or task avoidance. However, these students were driven by competition against each other. One major weakness of this activity was that I assumed that students would not create a wind and water resistant fort on the first try. One of my students created a fortress that protected them in both of these ways immediately and became bored with the task further. We had to adapt our lesson to ask him to create room for two more people in his fortress, while still being protective. To add academic

content further to this lesson, we discussed habitat forming animals and their adaptations. Other principles could have included architecture and construction.

Task 2: Problem Solving for Movement

The campers were generally very frustrated when I told them AFTER they'd built their forts that they needed to find a way to transfer something between the two of them. During construction of her fort, one student exclaimed, "I'm more of an independent worker" and moved her fort as far away from the other camper as possible. They were driven by competition and wanted to hide their ideas from other students. When given the task of moving a ball from one side of the room to the other with the rules listed, each of them started looking for loopholes and questioning what they could use as materials. One camper began to try and design building a catapult (without knowledge that this was one of our later tasks). The other wanted to create a "marble run" style of gutters to move the ball from one side of the room to the other. I reminded them both that this was a team activity, but each started working on their own plans. Each of them struggled with their ideas independently, and became frustrated because staff would not help them. They also were pressured by a time limit. One frequently muttered, "there's not enough time for this!" Finally, one camper suggested they build a zip line. This made them both excited, as they both started spouting ideas and working together quickly. Our male camper had seem zip lines in his video games, and our female camper wanted to create her own idea and was very proud. At first, they began working together and our male camper got frustrated and said it was "too hard." He began pacing back and forth and using a toy to fidget with from the table of supplies. A volunteer worked with him on creating a boat instead. The female camper; however, built a zip line with a string connecting the two forts. She placed the ball inside of the balloon, blew it up, then she tried to tape it to a string to zip it

along. Although the test-drives for her zip line did not work, she knew ideas to improve it had she been given different materials. During this activity, intended to be a team activity, both campers became frustrated with the other's ideas and wanted to work on their own. Ultimately, one completely opted out of the activity. With this tasks' focus being teamwork, I believe that overall it failed at getting the students to work together. It did teach me how twice exceptional students work with peers. The main focus of this task was problem solving to reach a desired outcome. Neither student successfully moved the ball completely from one fort to the other, but they each came up with three ideas to accomplish the task.

Task 3: Building Scarcity

Task 3 created the most rivalry at my camp. Students were given a box of spaghetti noodles and 40 marshmallows, as well as a piece of paper to build with. The requirement was to build "The most structurally sound, highest structure that could hold the most marshmallows at once." The male camper started this activity when he became frustrated with another, and remarked things such as "triangle pyramids are better than square pyramids because of their points of weight bearing" or "you are using too many of your materials, getting cocky there!" His humor and intensity with the activity led to a quick competition between him, the volunteers, and eventually the other campers as well. Twice the male camper took his entire structure apart to redesign it and "use less materials so that he can feed our family more." Within this task, to add more academics, we discussed scarcity of supplies when in the wild, and supply and demand as well. One camper built his to touch nearly my knees, while the other got frustrated with the task and wanted to return to creating the zip line. By this time in the camp, students were interested in doing more flexible activities (3 hours in). They would break off and begin working on their own task, then switch back when they wanted to.

Our flexible scheduling allowed them to swap between activities fluidly throughout the camp based on interest.

Task 4: Choice Activity

These campers were given the option of working on a catapult or creating a boat. Students both picked to create boats and developed completely different designs. One used egg cartons for her base, while the other used bubble wrap and even created "life jackets" to go with his boat. This activity served as a conclusion for our days of activities. One of our campers finished his activity very quickly and became bored and frustrated. He was "ready to call his mom to go home." We decided to have him help us fill our bucket of water for boat testing. He ran back and forth between the drinking fountain with a volunteer to fill it to burn off some energy and keep him focused on one task. He laughed uncontrollably during the race, and it gave him an outlet for some of his boredom. Both students' boats were functional. To practice social skills, they described their boat to the group and why they thought it would float best. They made an estimated how many objects their boat could hold. After this activity and presenting to peers, students were given free time to design their forts, boats, catapults, or spaghetti towers as they wanted.

General Personal Reflection of Camp

After observing exceptional camps, interviewing the woman who started one at Ball State, and creating my own, I have realized that I will forever be amazed by students and families faced with twice exceptionalities. Students can be overlooked for either their disability or giftedness and have to persevere through school, even if the best programs and adaptations aren't provided yet. Parents experience incredible pressure to make their children's experience as best as they can. They often assume responsibility and vigorously advocate for their children, collaborate with teachers, and help their children grow at home as well. In addition to developing an appreciation for these

families and their work, my teaching practice will be influenced through my experiences. First, I learned that to plan for twice exceptional students I must take a whole child approach as referenced in literature. The whole child approach considers how a child will thrive with everything from the materials offered to the amount freedom the child has in an activity to be creative. By considering the social, academic, and strength areas of the child, a teacher can plan to make lessons that will be successful. This camp has given me a new angle on my teaching, and a new portion of my teaching philosophy. I would like to espouse the idea that "creating with a child's best chance at success" is important. I want to create and facilitate lessons that consider academic goals, social needs, and students' strengths to optimize my student's chances at success.

Secondly, I realized the need for differentiation for all children. Learning about twice exceptional learners has been an extremely engaging endeavor; however, most of what I've learned can be helpful to nearly any student in a general education setting. Enriching academic experiences for students and considering ways to extend curriculum are essential for teachers. Before this experience, I doubted whether I would have time to create such enrichments; however I have realized through this camp, that differentiation can benefit all students. These opportunities allow them to interact with materials a new way, retain information, and apply their knowledge. I have already begun applying differentiation strategies during ninety minute reading blocks, allowing me to create choice enrichment activities for students, while I pull small groups or individuals for remediation. Throughout my education, we have learned to "gear up" for high learners, but I never understood that "gearing up" needs to be present for all learners until I created this twice exceptional camp.

Finally, I learned that education on twice exceptional students as well as gifted learners is still necessary for undergraduate education majors. Throughout my four years of undergraduate

school, I never heard the term "twice exceptional" until my senior year when I found it on my own. The lack of knowledge of these students as an entire population means that educators are entering the field without knowledge of how to create appropriate lessons for these students. This further perpetuates twice exceptional students' possibility of dropping out, losing interest in school, or falling behind in subjects that they could master.

Conclusions and Results for Educators

After observing twice exceptional camp, reading literature about this population, and designing my own camp, I have not only learned how to better my personal teaching practice, but also have gained an understanding of how the education field in general can better meet the needs of the twice exceptional population. First, undergraduate pre-service teachers need exposure to this population to meet students' needs. As research stated, gifts may overshadow disability or vice versa, or neither may show evidently in a given classroom. According to Lois Baldwin (2015), "educators are unaware of or not looking for…gifts and talents" (218). As a pre-service educator, I have not been made aware of a need to look for giftedness within my classroom. I have been educated on finding struggling learners and creating lessons to address their needs; however, my learning has not examined to how help students excel. I believe that a shift in requirements for teacher preparation must come, where we not only look at where students are in need of remediation, but where we can create opportunities that they will succeed. Creating programs where these students can thrive as well as develop their weaknesses is the hope of any pre-service educator. Within undergraduate education, courses should be required specifically in how to identify both giftedness and disabilities for special education and general education teachers. Simply waiting for students to have a masters in one of these areas is not sufficient. In addition,

these courses should promote differentiating instruction. Within a lesson plan, we may be asked to plan one way to "gear up our content" but that may not be enough. Yssel (2010) claims that "including planned secondary and tertiary activities" is important. These activities that "relate lesson or the larger unit are prepared and kept at specific stations in the room." (60). Differentiation strategies such as learning stations, small targeted groups, or collaborative learning groups can be introduced and specifically practiced in practicums. The biggest concern being time in the classroom, undergraduate teachers should be given tools and resources to create these secondary and tertiary tasks that provide more choice for opportunity, similar to the twice exceptional camps that I've experienced. In conclusion, undergraduate education must include identification of these students, as well as how to differentiate instruction with more opportunities.

Second, I believe that continual professional development for educators in the field must occur. The understanding and identification of twice exceptional learners is ever developing. Teachers are on the front line for identifying these students early in order to provide services that are least restrictive. Within my interviews, one parent discussed "I feel like I have let them both down by not advocating for them sooner and relying too much on the school to take action. New teachers should help get the ball rolling when they see a child struggling with school socially, academically, as well as when they see them succeeding." Specific training in identifying students with both gifts and disabilities must occur. As more educators become aware of the population and identification of such, best methods to work with students can be created. One suggestion I have is to create a conference for educators to observe a twice exceptional enrichment camp. Teachers could observe the camp in the morning, then receive professional development about identification and best practices for these learners in the afternoon. Finally, they can create their own lessons in the afternoon for these students. Hands on opportunities for both experienced and new teachers to

gain an understanding of working with these students can inspire best practices to be spread throughout corporations. Further, as more teachers understand the need for enrichment for students, they can adapt their own classrooms.

Teachers can apply these classroom practices to create more twice exceptional enrichment camps that promotes student, as one parent put it, "enjoyment, knowledge of [their] gifts, and practice with working with others [which leads] to a bit of increased self-confidence." Another parent explained, "it's great for [my student] to be around staff that have more of an understanding of 2E kids." The creation of learning experiences that are meaningful for these children and address both their strengths and weaknesses begin with adults being educated. Additional research is needed to support this movement. Specifically, research should examine enrichment and classroom teaching for twice exceptional students in lower grades, as identification often comes later for students to gain the full twice exceptional label. By middle school, students have already reached "the wall" where their giftedness can no longer compensate for their disabilities. Enrichment camps specifically for those students showing a particular brilliance, can allow for educators to promote strengths and provide an opportunity for students to interact with similar peers. These opportunities are invaluable in creating academic self-esteem and confidence for these incredible students..

References

Baldwin, Lois. Omdal, Stuart and Pereles, Daphne. "Beyond Stereotypes: Understanding, Recognizing, and Working with Twice-Exceptional Learners" *Teaching Exceptional Children.* March 2015. 216-225. Web.

Baum, Susan. Schader, Robin M. and Hebert, Thomas P. "Through a Different Lens: Reflecting on a Strengths-Based, Talent Focused Approach for Twice-Exceptional Learners." *Gifted Child Quarterly.* Volume 58:4. 2014. 311-327. Web.

Jeweler, S., Barnes-Robinson, L., Shevits, B., & Weinfeld, R. "Bordering On Excellence: A Teaching Tool for Twice Exceptional Students." *Gifted Child Today.* 2008. 31(2). Web.

National Education Association. (2006). *The Twice Exceptional Dilemma.* National Education Association Professional Library. Book.

Newman, T., & Sternberg, R. (Eds.). (2004). Students with Both Gifts and Learning Disabilities: Identification, Assessment, and Outcomes. Neuropsychology and Cognition Vol 25. New York, NY: Klewer Academic/Plenum Publishers. Book.

Ruf, D. (2005). *Losing Our Minds: Gifted Children Left Behind.* Scottsdale, AZ: Great Potential Press. Book.

Szulgit, R. (2008). *Twice-Exceptional Kids: A guide for Assisting Students Who are Both Academically Gifted and Learning Disabled.* Lanham, MD: Rowman & Littlefield Education. Book.

Tuttle, F., Becker, L., & Sousa, J. (1988). *Program Design and Development for Gifted and Talented Students: Third Edition.* Washington DC: National Education Association.

Willard-Holt, C., Weber, J., Morrison, K., & Horgan, J. "Twice-Exceptional Learners' Perspectives on Effective Learning Strategies." *Gifted Child Quarterly.* 57(4). 247-262. Web.

Yssel, N., Margison, J. and Merbler, J. "Puzzles, Mysteries, and Picasso: A Summer Camp for Students who are Gifted and Learning Disabled." *Teaching Exceptional Children.* September 2005. 42-47. Web.

Yssel, N., Prater, M., & Smith, D. "Finding the Right Fit for Twice Exceptional Students in Our Schools." *Gifted Child Today.* Winter 2010. 33(1). Web.